

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Canceled).

2. (Currently Amended) An electron spectroscopy analysis method for executing a desired analysis with respect to a depth direction of a sample to be analyzed by irradiating a high-energy particle to said sample to be analyzed under a vacuum atmosphere, and detecting a number and a kinetic energy of electrons emitted from said sample to be analyzed on the basis of a photoelectric effect, wherein the method comprises steps of ionizing a fullerene, irradiating the fullerene ionized at the accelerating voltage of from 2 kV to 10kV to the surface of said sample to be analyzed before irradiating the high-energy particle to said sample to be analyzed, and etching the surface of said sample to be analyzed.

3. (Previously Presented) The electron spectroscopy analysis method according to claim 2, wherein a fullerene having an atomicity of 100 or less is used as said fullerene.

4. (Original) The electron spectroscopy analysis method according to claim 3, wherein C60, C70 or C84 is used as said fullerene having an atomicity of 100 or less.

5. (Original) The electron spectroscopy analysis method according to claim 3, wherein an endohedral fullerene in C60, C70 or C84 is used as said fullerene having an atomicity 100 or less.

6. (Canceled).

7. (Currently Amended) An electron spectroscopy analytical apparatus for executing a desired analysis with respect to a depth direction of a sample to be analyzed by irradiating a high-energy particle to said sample to be analyzed from a high-energy particle irradiating unit under a vacuum atmosphere, and detecting a number and a kinetic energy of electrons emitted from said sample to be analyzed by an analyzer on the basis of a photoelectric effect, wherein the apparatus comprises an ion gun ionizing a fullerene and irradiating the fullerene ionized at the accelerating voltage of from 2 kV to 10kV, and the apparatus ionizes the fullerene and irradiates the fullerene ionized from said ion gun to the surface of said sample to be analyzed before irradiating the high-energy particle to said sample to be analyzed, and etches the surface of said sample to be analyzed.

8. (Previously Presented) The electron spectroscopy analytical apparatus according to claim 7, wherein a fullerene having an atomicity of 100 or less is used as said fullerene.

9. (Original) The electron spectroscopy analytical apparatus according to claim 8, wherein C60, C70 or C84 is used as said fullerene having an atomicity of 100 or less.

10. (Original) The electron spectroscopy analytical apparatus according to claim 8, wherein an endohedral fullerene in C60, C70 or C84 is used as said fullerene having an atomicity of 100 or less.

11. (Previously Presented) The electron spectroscopy analytical apparatus according to claim 7, wherein there is a fullerene supply device operably connected to the ion gun.